

Applicant(s): Johannes Bruijns  
Serial No.: 10/023,166  
For: Method of analyzing a data set comprising a tubular structure  
Filed: December 18, 2001  
Examiner: Dang, Duy M  
Group Art Unit: 2627

Attorney Docket No.: NL000772

### **IN THE CLAIMS:**

Please amend the claims according to the following:

1. (Currently Amended) A method of analyzing an object data set which comprises points in a multi-dimensional space and in which a tubular structure occurs, ~~said~~the method comprising the following steps:
  - a) choosing a starting position in or near ~~the~~a tubular structure;
  - b) deriving a cutting plane through the tubular structure at ~~the~~a starting position;
  - c) determining a number of points forming part of ~~the~~a surface of the tubular structure in ~~the~~a vicinity of the starting position, ~~and~~;
  - d) calculating a gradient to the surface for each of ~~said~~the points;  
~~characterized in that the method also comprises the steps of:~~
  - e) determining for each point a vector from ~~the~~a center of the tubular structure to ~~said~~the point;
  - f) determining ~~the~~an angle between ~~said~~the vector and the gradient at ~~said~~the point;
  - g) adding ~~said~~the point to a selection of points if ~~said~~the angle is equal to or smaller than a predetermined ceiling value;
  - h) using ~~said~~the selection of points to calculate an orientation for the cutting plane such that ~~the~~a direction thereof is as parallel as possible to ~~the~~a longitudinal axis of the tubular structure at the starting position, ~~and~~;
  - i) repeating the steps a) through h) for a new starting position along the tubular structure if necessary.
2. (Original) A method as claimed in claim 1, also comprising the steps of:  
defining a sphere, which is at least partially intersected by the tubular structure, and  
performing the steps e) through g) only for points lying inside the sphere.
3. (Previously Amended) A method as claimed in claim 1, wherein the steps e) through g) are performed only for points lying at a predetermined maximum distance from the cutting plane.

Applicant(s): Johannes Bruijns  
Serial No.: 10/023,166  
For: Method of analyzing a data set comprising a tubular structure  
Filed: December 18, 2001  
Examiner: Dang, Duy M  
Group Art Unit: 2627

Attorney Docket No.: NL000772

4. (Currently Amended) A computer ~~program~~readable medium for carrying out the method as claimed in claim 1.